PART I
PURPOSE AND NEED

PART I
PURPOSE AND NEED

INTRODUCTION

This transportation conformity reference guide (the Guide) was prepared by the Federal Highway Administration (FHWA), in cooperation with the Federal Transit Administration (FTA) and the Environmental Protection Agency (EPA), as a tool to facilitate compliance by State and local agencies with the transportation conformity requirements. FHWA has designed this Guide so that it can be updated periodically to include new information, guidance, case studies, research findings, or approaches to meeting requirements (e.g. new NAAQS). This Guide is not a "cookbook" on how to work through the transportation conformity process; it does not provide detailed technical modeling guidance and does not prescribe how to make a conformity determination. Rather, it is a reference manual which contains transportation conformity rule and relevant preamble language, questions and answers, and lists of resource materials. The information is organized according to the provisions which apply to all nonattainment and maintenance areas at all times followed by specific requirements for specific pollutants and designations. The Guide is designed to be useful to both seasoned practitioners and newcomers to the transportation conformity process. All relevant materials and information needed for agencies to fully understand transportation conformity are assembled in this Guide in an accessible and easy to read format. The need for this Guide stems from the requirement to integrate transportation and air quality planning which is included in the Clean Air Act Amendments (CAA) of 1990, the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991,[1] and the Transportation Equity Act for the 21st Century (TEA-21)[2, 3].

This Guide does not replace law, regulation, guidance, or requirements. In the case of any discrepancies or differences found between the EPA transportation conformity rule and this Guide, readers should defer to the specific language and requirements included in the transportation conformity rule and subsequent guidance issued by the U.S. Department of Transportation (DOT) and EPA.

STRUCTURE OF THIS GUIDE

The Guide is organized in four major Parts:

Part I - Purpose and Need
Part II- How to Use This Document
Part III - Transportation Conformity Requirements
Part IV - Emerging Issues

[1] 42 U.S.C. §7506 and related requirements of 23 U.S.C. §109 (j).

[2] Transportation Equity Act for the 21st Century, Public Law 105-178, June 9, 1998.

[3] Throughout this Guide, appropriate reference will be made to either TEA-21 or ISTEA, as applicable.

Part I summarizes the purpose and need for the Guide and provides a brief explanation of the CAA and ISTEA/TEA-21 statutory requirements. Part II explains how the Guide is organized and how to most effectively use the Guide to find information on specific topics or areas of interest. Part III, transportation conformity requirements, is the major part of this Guide and presents the most current information on requirements. Part III includes references to relevant CAA and ISTEA/TEA-21 statutory requirements, EPA's transportation conformity rule (i.e. regulatory requirements) and relevant preamble language that helps explain the rule, and DOT and EPA guidance. In addition, real world examples and practices are used in order to help readers understand the complex relationship between the elements of the transportation and air quality planning processes, and the requirements of the transportation conformity rule. Each section of Part III is self-contained. However, readers may need to refer to more than one section within Part III to understand the complete relationships and interactions within the process. Part IV provides a discussion of emerging issues that will impact transportation conformity in the near future.

As further assistance to the reader, this Guide includes examples from nonattainment and maintenance areas to show how some areas have complied with specific elements of the rule. For example, some use sample checklists to show that all of the conformity requirements are being addressed. We have included these in the appendices along with EPA and U.S. Department of Transportation (DOT) informational materials and guidance on transportation conformity and related issues. The bibliography includes reference materials for those seeking additional information on a specific subject and a glossary is included in the back of the Guide.

BACKGROUND OF TRANSPORTATION CONFORMITY

The concept of coordinating the transportation and air quality planning processes and ensuring that transportation plans and Transportation Improvement Programs (TIPs) are consistent with State Implementation Plans (SIPs) began with the Clean Air Act Amendments of 1977. The most recent update to these requirements was included in the Clean Air Act Amendments (CAA) of 1990.[4] Exhibit 1 summarizes the transportation conformity requirements from their inception to date and illustrates how the requirements have evolved over the past twenty years. The Exhibit also summarizes the amendments to the transportation conformity rule since 1993.

SUMMARY EXPLANATION OF CAA AND ISTEA REQUIREMENTS

In order to receive transportation funding or approvals from the FHWA/FTA, State and local transportation agencies with plans, programs or projects in nonattainment or maintenance areas, must demonstrate that they meet the transportation conformity requirements of the CAA as set forth in the transportation conformity rule.[5] In addition, the ISTEA (and now TEA-21), sets forth

[4] 42 U.S.C. §7506.

[5] 40 CFR, Parts 51 and 93, as amended by 62 FR 43780, Aug. 15, 1997.

Exhibit 1
Summary of Transportation Conformity Requirements - Inception to Date

Milestone in Conformity History	Key Provisions
Federal Aid Highway Act of 1970	§109(j) provides that "The Secretary, after consultation with the Administrator of the Environmental Protection Agency, shall develop and promulgate guidelines to assure that highways constructed pursuant to this title are consistent with any approved plan for the implementation of any ambient air quality standard for any air quality control region designated pursuant to the Clean Air Act, as amended"
Clean Air Act Amendments of 1977 (Pub. L. 95-95)	The assurance of conformity was an affirmative responsibility of the head of each Federal agency and no Metropolitan Planning Organization (MPO) could approve any transportation plan, program, or project that did not conform to a State or Federal Implementation Plan. Specifically, the 1977 CAA stated: "No Federal department shall 1) engage in, 2) support in any way or provide financial assistance for, 3) license or permit, or 4) approve any activity which does not conform to a (State Implementation Plan) after it has been approved or promulgated"
June, 1978—Memorandum of Understanding	The FHWA and Urban Mass Transportation Administration (now FTA), Memorandum of Understanding provided EPA an opportunity to jointly review and comment on the conformity of transportation plans and programs and provided transportation officials the opportunity to review and comment on State Implementation Plans
June, 1980—EPA and DOT jointly issued "Procedures for Conformance of Transportation Plans, Programs, and Projects with CAA State Implementation Plans"	The guidance required that certifications be made that transportation planning had been conducted according to a continuous, cooperative, and comprehensive planning (3-C) process and consistent with Clean Air Act requirements. Transportation plans and programs were considered to conform with the SIP if they did not adversely affect the transportation control measures (TCMs) in the SIP, and if they contributed to reasonable further progress in implementing those TCMs. Transportation projects would conform if it were a TCM from the SIP, came from a conforming TIP, or did not adversely affect the TCMs in the SIP
Jan., 1981—DOT Interim Final Rule (46 FR 8426, Jan. 26, 1981)	This rule built upon the 1980 joint guidance, and interpreted conformity in the context of agencies implementing agreed upon transportation control measures (TCMs). Compliance with the conformity requirements was to be demonstrated as part of the transportation planning and National Environmental Policy Act (NEPA) processes
Nov., 1990—Clean Air Act Amendments (CAA) of 1990 [CAA §176 (c)(1), 42 U.S.C. §7506 (c)(1)]	The scope and content of transportation conformity provisions were expanded to require the reconciliation of the emissions impacts of transportation plans, programs, and projects with the SIP. Specifically, transportation plans, programs, and projects must conform to the purpose of the SIP. This integration of transportation and air quality planning is intended to ensure that transportation plans, programs, and projects will not: *"(i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standard or any required interim emissions reductions or other milestones in any area"*

Milestone in Conformity History	Key Provisions
June, 1991- Interim Guidance for Determining Conformity of Transportation Plans, Programs, and Projects, June 7, 1991	The Interim guidance was based upon §176(c)(3) of the CAA and provided that, until the conformity SIP revision was approved, conformity of transportation plans, programs, and projects would be demonstrated if plans and programs: 1) were consistent with the most recent estimates of mobile source emissions; 2) provide for the expeditious implementation of transportation control measures in the applicable SIP; 3) with respect to ozone and carbon monoxide nonattainment areas, contribute to annual emissions reductions consistent with sections 182(b)(1) and 187(a)(7); 4) transportation projects must come from a conforming transportation plan and program; and 5) in carbon monoxide nonattainment areas, such projects must eliminate or reduce the severity and number of violations of the CO standards in the area substantially affected by the project
Nov., 1993—Transportation Conformity Rule, 58 FR 62188**,** Nov. 24, 1993	Required by the 1990 CAA, this rule established the criteria and procedures by which FHWA, the FTA, and MPOs determine the conformity of Federally funded or approved highway and transit plans, programs, and projects to SIPs
Aug., 1995—Transportation Conformity Rule Amendments, 60 FR 40098, Aug. 7, 1995	These amendments aligned the dates of conformity lapses due to SIP failures with the application of Clean Air Act highway sanctions for certain ozone areas and all areas with disapproved SIPs with a protective finding
Nov., 1995— Transportation Conformity Rule Amendments 60 FR 57179, Nov. 14, 1995	These amendments: 1) aligned the date of conformity lapses with the date of application of Clean Air Act highway sanctions for any failure to submit or submission of an incomplete control strategy SIP; 2) extended the grace period before which areas must determine conformity to a submitted control strategy SIP; 3) established a grace period before which transportation plan and program conformity must be determined in newly designated non-attainment areas (Note: The District of Columbia Circuit Court subsequently found the grace period to be invalid and it was no longer applicable. In October, 2000 Congress amended the CAA, to include the 1 year grace period as a matter of law.); and 4) changed the nitrogen oxides (NO_x) provisions of the transportation conformity rule to be consistent with the (NO_x)requirements of the Clean Air Act and previous commitments made by EPA. These amendments also allowed any TCM from an approved SIP to proceed during a conformity lapse, with the expectation that TCMs would be coordinated through the transportation planning process, as required by 23 CFR Part 450 and 49 CFR Part 613, ISTEA's State and Metropolitan Planning Regulations
Aug., 1997—Transportation Conformity Rule Amendments 40 CFR Parts 51 and 93, Aug. 15, 1997	The revised transportation conformity rule: 1) streamlines and clarifies regulatory text; 2) eliminates the build/no-build test when SIP budgets have been submitted; 3) provides more flexibility even where there are no submitted SIP budgets; 4) allows for previously planned non-Federal projects to go forward when there is no currently conforming transportation plan/TIP (the Court found this provision invalid and it no longer applies); 5) limits network-based modeling requirements to large, urban areas; 6) provides rural areas the flexibility to choose among several conformity tests; 7) streamlines and clarifies modeling requirements; and 8) makes consequences of an EPA SIP disapproval without a protective finding less severe (the Court found this provision invalid and it no longer applies).

Milestone in Conformity History	Key Provisions
March 2, 1999— U. S. Court of Appeals for the District of Columbia Circuit, decision on transportation conformity rule	The decision affected five conformity provisions: 1) a provision allowing grandfathered projects (previously conformed projects) to proceed during a conformity lapse once the NEPA process is completed; 2) a provision allowing certain regionally significant non-federal projects to proceed during a conformity lapse; 3) a provision allowing conformity findings based on submitted budgets, prior to EPA approval action; 4) a provision allowing a conformity grace period for 120 days after EPA disapproval of a SIP without a protective finding; and, 5) a provision allowing certain safety margins to be used prior to EPA approval.
May 14, 1999—EPA Conformity Guidance on Implementation of March 2, 1999 Conformity Court Decision	The guidance provides information and questions and answers on EPA's new adequacy process for submitted budgets. The guidance also included information about projects requiring federal approval, SIP disapprovals, non-federal projects, and certain safety margins.
May 14, 1999— U. S. Court of Appeals for the District of Columbia Circuit decision on the proposed new National Ambient Air Quality Standards, as amended by order dated June 18, 1999 and on rehearing (October 29, 1999)	On May 14, 1999, the U.S. Court of Appeals for the D.C. Circuit issued a decision which remanded the new NAAQS back to EPA. Although the Court did not vacate the new 8-hour ozone standard, the court broadly concluded that the revised standard "cannot be enforced." EPA filed a petition for re-hearing of the May 14, 1999 Court decision. On October 29, 1999, the Court denied the petition in part and granted it in part. Specifically, the court modified its decision on implementation to provide that EPA "can enforce a revised primary standard only in conformity with" the ozone provisions that apply to nonattainment areas for the 1-hour standard. In its May 14, 1999, decision, the court vacated the coarse particulate matter standards, and remanded the fine particulate matter standards. The EPA has proposed to reverse the past revocation decisions and revise its regulations to provide that the 1-hour ozone standard will remain effective until a fully enforceable 8-hour ozone standard is in place to ensure that EPA has a public health backstop in the interim period before these issues are fully decided. The federal government has asked the U.S. Supreme Court to review aspects of the D.C. Circuit decision on the 8-hour ozone standard. The implementation of the new standards is uncertain at this time.
June 18, 1999– Federal Highway Administration/Federal Transit Administration Supplemental Guidance for the Implementation of the Circuit Court Decision Affecting Transportation Conformity	This guidance supercedes the March 31, 1999 Interim Guidance and May 7, 1999 Supplemental Guidance. The May 7, 1999 Memorandum was incorporated into this guidance unchanged, so that all guidance in response to the Court decision is contained in a single document. This guidance provides further information on active design and right-of-way acquisition for non-exempt projects. The guidance states: 1) only those highway projects which have received approval of PS & E's, and transit projects that have received a FFGA, or equivalent approvals, prior to the conformity lapse (or the March 2, 1999, decision whichever is later) may proceed during a conformity lapse; and, 2) exempt projects contained in 40 CFR 93.126 and 93.127, and TCMs in an approved SIP may continue. The guidance also clarifies that Federal aid for active design and right-of-way acquisition projects, with certain exceptions, will be halted during a conformity lapse.
March 28, 2000- Environmental Protection Agency–Designation of New 8-Hour Ozone Nonattainment Areas	This guidance outlines the process EPA will use to designate areas as attainment/unclassifiable or nonattainment for the 8-hour ozone standard. This has implications for any new nonattainment areas because they will have to comply with the transportation conformity requirements that will be determined by EPA . See the EPA website at: http://www.epa.gov/ttncaaa1/tl/memoranda/desig8hr.pdf

Milestone in Conformity History	Key Provisions
March 29, 2000- Environmental Protection Agency–Boundary Guidance on Air Quality Designations for the 8-hour Ozone NAAQS.	This guidance provides States, local air pollution control agencies and Tribes information on EPA views on the boundaries for nonattainment areas for the 8-hour ground-level ozone standard. The determinations of boundaries will be important for MPOs that will need to comply with transportation conformity requirements under the new 8-hour ozone standard. See the EPA website at: http://www.epa.gov/ttncaaa1/tl/memoranda/desig8hr.pdf
April 10, 2000- Environmental Protection Agency–Transportation Conformity Rule Amendment	This amendment deletes a provision in the transportation conformity rule (93.102(d) which allowed new nonattainment areas a one-year grace period before conformity began applying. The U.S. Court of Appeals for the District of Columbia overturned the grace period provision in November 1997 and EPA was required be a court settlement with Environmental Defense Fund to finalize rulemaking on this issues and delete the grace period by March 31, 2000. See Appendix F.
April 19, 2000- U.S. Department of Transportation and Environmental Protection Agency- National Memorandum of Understanding	The purpose of this national MOU is to ensure the proper implementation of the transportation conformity rule's provisions through better and more efficient EPA and DOT consultation in order to facilitate timely conformity decisions. It also ensures that integrated transportation and air quality planning and project development processes will be achieved in a timely way, through the transportation conformity and State Implementation Plan (SIP) development processes. See Appendix O.
October 27, 2000- Departments of VA-HUD-Independent Agencies Appropriations Act 2001 and the Energy and Water Development Appropriations Act of 2001- Reinstatement of the 1-year conformity grace period for newly designated nonattainment areas	The FY2001 EPA appropriations bill included an amendment to Section 176(c) of the CAA that reads as follows: (6) Notwithstanding paragraph 5, this subsection shall not apply with respect to an area designated nonattainment under section 107(d)(1) until one year after that area is first designated nonattainment for a specific national ambient air quality standard. This paragraph only applies with respect to the national ambient air quality standard for which an area is newly designated nonattainment and does not affect the area's requirements with respect to all other national ambient air quality standards for which the area is designated nonattainment or has been redesignated from nonattainment to attainment with a maintenance plan pursuant to section 175(A) (including any pre-existing national ambient air quality standard for a pollutant for which a new or revised standard has been issued).
January 18, 2001- Federal Highway Administration, Federal Transit Administration and Environmental Protection Agency- Use of Latest Planning Assumptions in Conformity Determinations	This joint guidance clarifies the FHWA/FTA/EPA expectations for implementing the conformity rule's requirements for use of latest planning assumptions in conformity determinations. The guidance also reiterates EPA's expectations for using latest planning assumptions in the development of motor vehicle emissions budgets in State Implementation Plans (SIPs). Nonattainment and maintenance areas must use the most recent planning assumptions that are available in their conformity determinations. Areas are encouraged to review and update their planning assumptions regularly and are strongly encouraged to review and strive towards regular 5-year updates of planning assumptions, especially population, employment, and vehicle registration assumptions. See Appendix P.

Milestone in Conformity History	Key Provisions
February 27, 2001- U.S. Supreme Court Ruling on the New Ozone Air Quality Standards (EPA v. ATA)	On February 27, 2001, the U.S. Supreme Court issued an opinion regarding EPA's new air quality standards. The Court rejected arguments that the CAA requires the government to consider implementation costs in setting the standards and held that EPA acted within the power it was delegated from Congress when it set the new standards. Specifically, the Court rejected the constitutional challenges to the new 8-hour ozone standard but ruled that EPA's implementation policy is "unlawful" and that EPA needs to develop a reasonable interpretation. The Court concluded that the CAA provisions concerning the implementation of revised ozone standards in subparts 1 and 2 of Title 1 of the CAA are ambiguous in the manner in which they interact, and that EPA could implement the new standards by providing for the "reasonable resolution" of the ambiguity. Once EPA develops an implementation plan, new areas designated nonattainment for the 8-hour ozone standard will need to comply with transportation conformity requirements.
March 5, 2001- U.S. Supreme Court decision on the NO_X transport SIP	On March 5, 2001, the U.S. Supreme Court declined to hear an appeal filed by industry and several state governments of a U.S. Court of Appeals decision largely upholding EPA's final rule on downwind transportation of nitrogen oxides (i.e., the NO_X transport SIP). States can now proceed to implement measures under their NOX SIPs that were prepared in response to the EPA's 1998 NO_X SIP call. This may assist nonattainment areas in demonstrating attainment because of the contribution that NO_X makes to violations of the ozone standard.
Spring, 2001- EPA Release of MOBILE6.	EPA will formally release MOBILE6 in the Summer of 2001 and in March, 2001 released a draft User's Guide and made the model available to States and MPOs for a 90-day preview period. It is expected that after the preview period ends and EPA has reviewed comments or issues raised during the preview period, the model will formally be released through the Federal Register and a transition period to this mobile source emissions factor model will commence.

metropolitan planning provisions that reinforce and complement the CAA conformity provisions. To meet the requirements, Metropolitan Planning Organizations (MPOs) must explicitly show that the anticipated emissions resulting from implementation of transportation plans, programs and projects are consistent with and conform to the purpose of the SIP for air quality.

In August, 1997 a revised transportation conformity rule was issued in an effort to streamline the transportation conformity process and was based in part, on experience gained since 1993 by Federal, State, and local area transportation and air quality agencies.

On March 2, 1999 the U.S. Court of Appeals for the D.C. Circuit issued a decision which affected several provisions of the 1997 conformity rule, including the use of submitted budgets, the advancement of grandfathered and non-federal projects during a conformity lapse, and the 120-day grace period after SIP disapprovals. DOT and EPA issued guidance to implement the Court decision and EPA and DOT plan to amend the conformity rule to reflect the Court decision soon.

STATUTORY REQUIREMENTS FOR TRANSPORTATION CONFORMITY

The 1990 CAA prohibits any Federal agency from supporting activities that do not conform to the applicable SIP or FIP. Specifically, the CAA prohibits Metropolitan Planning Organizations (MPOs) from approving transportation plans, projects or programs that do not conform to a SIP. Detailed information on SIPs can be found in Part III, Section B of this Reference Guide.

§176(c)(1) of the CAA reads:

> *No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under section 110. No metropolitan planning organization designated under section 134 of title 23, United States Code, shall give its approval to any project, program, or plan which does not conform to an implementation plan approved or promulgated under section 110. The assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to an implementation plan means—*
>
> *(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards and achieving expeditious attainment of such standards; and*
> *(B) that such activities will not—*
> *(i) cause or contribute to any new violation of any new standard in any area;*
> *(ii) increase the frequency or severity of any existing violation of any standard in any area; or*
> *(iii) delay timely attainment of any standard or any required interim reductions or other milestones in any area. The determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates as determined by the metropolitan planning organization or other agency authorized to make such estimates.*

(Note: The full text of CAA §176(c)is included in Appendix A.)

In short, transportation conformity is a way to,

1) Ensure that planning for transportation systems is consistent with and conforms to State air quality plans for attaining and maintaining the health-based National Ambient Air Quality Standards (NAAQS), *and*

2) Ensure that neither the transportation system as a whole nor individual transportation projects cause new air quality violations or worsen existing violations.

Taken together with the planning provisions of the ISTEA[6] (and TEA-21 when the planning regulations are revised) transportation conformity is intended to ensure that integrated transportation and air quality planning occurs in areas designated by EPA as nonattainment or maintenance areas.[7] Together, these provisions require that it be demonstrated that transportation plans, programs, and projects funded or approved by FHWA and/or FTA funds conform to the SIP's purpose which is to meet the National Ambient Air Quality Standards (NAAQS). The transportation conformity process integrates transportation and air quality planning by requiring that transportation plans, programs, and projects verify that the expected emissions resulting from their implementation are consistent with and conform to the purpose of the SIP.

Nonattainment Areas

The Federal standards developed by EPA set allowable concentrations and exposure limits for various pollutants. Title I of the CAA[8] establishes criteria for attaining and maintaining the NAAQS. A nonattainment area is a geographic region that EPA has designated pursuant to the CAA[9] as not meeting the NAAQS for any pollutant for which a standard exists. Subsequent to the passage of the CAA, EPA released the nonattainment classifications and exposure limits for transportation-related pollutants. Exhibit 2 below shows the standards for the key transportation-related pollutants. The standard for nitrogen dioxide (NO_2) is not listed because Los Angeles is the only NO_2 nonattainment area in the United States. Transportation conformity only applies to ozone, carbon monoxide, particulate matter (PM), and NO_2 nonattainment and maintenance areas.

The new NAAQS for ozone and particulate matter (PM) set by EPA in July of 1997 are discussed in Part IV-Emerging Issues. (In the year 2000, EPA plans to designate areas under the new, 8-hour ozone standard.)

On May 14, 1999, the U.S. Court of Appeals for the D.C. Circuit issued a decision which remanded the new NAAQS back to EPA. Although the Court did not vacate the new 8-hour standard, EPA cannot

[6] 23 CFR Part 450, 49 CFR Part 613.

[7] 23 U.S.C. §§101-128. (Due to litigation over the applicability of conformity to attainment areas, The National Highway System Designation Act of 1995 specifically restricted the application of the conformity requirements to nonattainment and maintenance areas only.)

[8] CAA §§101-192, 42 U.S.C. §§7401-7514(a).

[9] CAA §107(d), 42 U.S.C. §7407(d).

enforce the standard, the court broadly concluded that the revised standard "cannot be enforced." EPA filed a petition for re-hearing of the May 14, 1999 Court decision. On October 29, 1999, the Court denied the petition in part and granted it in part. Specifically, the court modified its decision on implem4ntation to provide that EPA "can enforce a revised primary standard only in conformity with" the ozone provisions that apply to nonattainment areas for the 1-hour standard. The implementation of the new standards is uncertain at this time.

Exhibit 2
National Ambient Air Quality Standards for Key Transportation-related Pollutants*

Pollutant	Primary Standards	Averaging Time
Carbon Monoxide (CO)	10 Fg/m^3 (9 ppm) 40 Fg/m^3 (35 ppm)	8-hour (with one exceedance per year) 1-hour (with one exceedance per year)
Ozone (O_3)	235 Fg/m^3 (0.12 ppm) (0.08 ppm)	1-hour Average[10] Maximum Daily 8-hour[11]
Particulate Matter ($PM_{2.5}$)	15 Fg/m^3 65 Fg/m^3	Annual Average[12] 24-hour[13]
Particulate Matter ** (PM_{10})	50 Fg/m^3 150 Fg/m^3	Annual (Arithmetic Mean)[14] 24-hour[15]

* New ozone and particulate matter standards were announced in July 1997 by the EPA. See Part IV of this Guide for a discussion of the new NAAQS and their impact on transportation conformity.
**PM-10 is particulate matter 10 microns or smaller. $PM_{2.5}$ is fine particulate matter of 2.5 microns or smaller.

[10] The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is equal to or less than one, as determined according to Appendix H of 40 CFR Part 50.

[11] The standard is evaluated on the 4th highest (daily maximum) 8-hour average per year, averaged over 3 years.

[12] The annual standard will be met when the 3-year average of the annual arithmetic mean $PM_{2.5}$ concentration is less than or equal to 15 Fg/m^3.

[13] The 24-hour standard will be met when the 3-year average of the 98th percentile of 24-hour $PM_{2.5}$ concentration is less than or equal to 65F^3/m^3.

[14] The PM_{10} annual standard is attained when the expected annual arithmetic mean concentration is less than or equal to 50Fg/m^3.

[15] The 24-hour PM_{10} standard is based on the 99th percentile concentration averaged over three years.

Officials in each nonattainment area must take specified actions within a specified time frame to reduce emissions and attain the NAAQS. The CAA[16] discusses the specific, detailed planning requirements for nonattainment areas based on designation status. The actions become more stringent and numerous as the air quality problem gets worse. This is discussed more fully in Section B and Section C - Chapter 4 of this Guide. Exhibits 3, 4, and 5 show the NAAQS classifications, requirements and attainment dates for ozone, carbon monoxide, and PM-10 nonattainment areas, respectively.

Maintenance Areas

A maintenance area is any geographic region of the United States previously designated nonattainment pursuant to the CAA, and subsequently redesignated to attainment. Transportation conformity requirements also apply to maintenance areas. In addition, if a nonattainment area pursues redesignation under the CAA,[17] the area is required to develop a maintenance plan which is a revision to the SIP that provides for the maintenance of the NAAQS for the applicable pollutant. The maintenance plan must cover at least the 10-year period of time after EPA approves a State's request for redesignation to attainment pursuant to CAA §107(d). Eight years after redesignation as a maintenance area, each State must submit to EPA a revised maintenance plan for the 10-year period subsequent to the expiration of the first 10-year period. Therefore, the maintenance period would cover a 20-year period after an area's redesignation and the conformity requirements would apply for the entire period. Specific information on maintenance area requirements is included in Chapters 7, 8, 9, and 10.

Since the adoption of the CAA, the air quality in many areas has improved and some areas have been redesignated from nonattainment to maintenance areas. For a current listing of nonattainment or maintenance areas contact EPA's website at: www.epa.gov.

Transitional Ozone Nonattainment Areas

Since the promulgation of the new NAAQS for ozone in July 1997, EPA has been working to develop transportation conformity requirements for areas that have met the old one-hour ozone standard but that will not likely meet the new 8-hour standard. This effort has been on-hold since the March 2, 1999 Court decision. Contact EPA's website: http://ttnwww.rtpnc.epa.gov/implement for the latest information and developments on the new NAAQS.

[16] 42 U.S.C. §7410.

[17] CAA §175A(a), 42 U.S.C. §7505(a).

Exhibit 3
NAAQS Classifications & Control Requirements for One-hour Ozone Standard
(All requirements are cumulative; for example, areas classified as moderate must also fulfill the requirements for areas classified as marginal)

Classification	1-hour Concentration	Attainment Date	Requirements/Actions
Marginal	*0.121 to 0.138*	11/15/93	**Existing SIP Commitment**—Implement current commitments; correct SIP deficiencies **Basic Inspection and Maintenance Program (I/M)**—Basic I/M Program should be revised to meet the requirements in the SIP, or EPA guidance, whichever is more stringent, if such a program were required before enactment of the CAA
Moderate	0.138 to 0.160	11/15/96	**Basic Inspection & Maintenance Program**—The SIP is required to be revised to include a basic I/M program, regardless of whether such a Program was required before the CAA **Stage II Vapor Recovery Program**—Submit a Stage II Vapor Recovery Program by November 15, 1992, that is designed to reduce emissions from refueling at retail fuel outlets for facilities that sell more than 10,000 gallons per month (50,000 gallons per month for small businesses) **Contingency Measures**—Contingency provisions, which may include transportation control measures (TCMs), must be provided for in the 1993 SIP submittal. TCMs are directed toward reducing emissions by improving traffic flow, reducing congestion, or reducing vehicle use. Contingency measures will take effect without further action by the State or the EPA at any point the State fails to meet the 15 percent emissions reduction targets required by 1996, fails to attain the NAAQS target date, or, in the case of areas designated serious and above, fails to meet the 3-percent annual emissions reductions required after 1996
Serious	0.160 to 0.180	11/15/99	**Enhanced Inspection and Maintenance Program**—Submit an enhanced I/M Program by November 15, 1992, that meets all of EPA's requirements for enhanced I/M. The National Highway System Act of 1995 prohibits EPA from requiring adoption or implementation by a State of a test-only I/M240 enhanced vehicle inspection and maintenance program as a means of compliance with section 182 or 187 of the CAA, but the EPA may approve such a program if a State chooses to adopt the program as a means of compliance with such section. **Clean Fuel Fleet Program**—Areas with a 1980 population of 250,000 or more must revise the SIP by May 15, 1994, to contain a clean-fuel vehicle program for centrally fueled fleets of 10 or more vehicles. The SIP must include programs to ensure the effectiveness of the clean-fuel fleet program
Severe 1 Severe 2	0.180 to 0.190 0.190 to 0.280	11/15/05 11/15/07	**Vehicle Miles Traveled (VMT) Limitations**—Vehicle miles traveled is the sum of distances traveled by all motor vehicles in a specified region. Submit specific transportation control strategies and measures by November 15, 1992, for implementation to offset growth in emissions from growth in VMT or number of trips. VMT offset SIPs do not establish motor vehicle emissions budgets for conformity determinations. **Reformulated Gasoline**—In 1995, reformulated gasoline was mandated in the worst nine ozone areas: Baltimore, Chicago, Hartford (CT), Houston, Los Angeles, Milwaukee, New York City, Philadelphia, and San Diego. In accordance with a January 4, 2000 Court ruling, only moderate and above nonattainment areas may "opt-in" to the reformulated gasoline program. See:http://pacer.cadc.uscourts.gov/common/opinions/200001/098-1561a.txt .

Extreme	0.280 and above	11/15/10	**Measures for Heavy-duty Vehicles**—Extreme areas may submit additional measures to reduce the use of high-polluting or heavy-duty vehicles during peak traffic hours

Source: *Transportation Programs and Provisions of the Clean Air Act Amendments of 1990*, U.S.DOT, Federal Highway Administration, 1992, pp. T-1, T-2.

Exhibit 4
NAAQS Classifications & Control Requirements for Carbon Monoxide
(All requirements are cumulative; for example, areas classified as moderate (>12.7 ppm) must also meet the requirements for areas classified as moderate <12.7 ppm)

Classification	8-hour Concentration	Attainment Date	Requirements/Actions
Moderate	<12.7 ppm	12/31/96	**Oxygenated Gasoline**—Areas with a design value of 95 ppm or above must submit a revision by November 15, 1992, requiring gasoline with no less than 2.7 percent oxygen content in the nonattainment area during the winter months **Basic Inspection and Maintenance Program (I/M)**—The SIP is required to be revised to include a basic I/M Program, if such a Program were required before enactment
Moderate	>12.7ppm >16.5 ppm	12/31/96	**Enhanced Inspection and Maintenance Program**—Submit provision for an enhanced I/M Program by November 15, 1992, that meet all of EPA's requirements for such a program. .The National Highway System Act of 1995 prohibits EPA from requiring adoption or implementation by a State of a test-only I/M240 enhanced vehicle inspection and maintenance program as a means of compliance with section 182 or 187 of the CAA, but the EPA may approve such a program if a State chooses to adopt the program as a means of compliance with such section. **VMT Forecast** —Revise the SIP by November 15, 1992, to include an annual VMT forecast until attainment. Reports shall contain annual updates of the VMT forecasts and estimates of actual VMT levels. Such SIP revisions do not establish budgets for use in conformity determinations. **Contingency Measures**—Contingency provisions (some of which could be TCMs) must be identified in the 1992 SIP submittal to implement specific measures if any estimate of VMT exceeds predicted levels or the area fails to attain the NAAQS. These measures take effect without further action by the State or the EPA **Clean-fuel Fleet Program**—Areas having a design value at or above 16 ppm and a 1980 population of 250,000 or more must revise the SIP by May 15, 1994, to contain a clean-fuel vehicle program for centrally fueled fleets of 10 or more vehicles. The SIP must include provisions to ensure the effectiveness of the program
Serious	16.5 and above	12/31/00	**Vehicle Miles Traveled Limitations**—Submit specific transportation control strategies by November 15, 1992, for implementation to offset growth in emissions from growth in VMT or number of trips. Such SIP revisions do not establish budgets for use in conformity determinations.

Source: *Transportation Programs and Provisions of the Clean Air Act Amendments of 1990*, U.S. DOT, Federal Highway

Administration, 1992 , p. T-3.

Exhibit 5
NAAQS Classifications and Requirements for PM-10

Classification	8-hour Concentration	Attainment Date	Requirements/Actions
Moderate	9.1 through 16.4	12/31/94	**SIP Submittal**—Submit a SIP by November 15, 1991, demonstrating attainment of the NAAQS by December 31, 1994
Serious	16.5 and Above	Varies	**SIP Submittal**—Submit a SIP no later than 4 years after reclassification of the area to serious. The SIP must demonstrate attainment of the NAAQS by no later than the 10th calendar year after the area's classification

Source: *Transportation Programs and Provisions of the Clean Air Act Amendments of 1990*, U.S. DOT, Federal Highway Administration, 1992, p. T-3.